

the established company as those are the only mines of any consequence now under contract with the company—the San Francisco class of miners having been terminated in the directors' report last year would be soon be fully absorbed by the company.

In the event of the abandonment of the Franklin and Sulphur Mines, the purchase of one must be followed up with increased activity, in order to keep up the new barrel amalgamation mill at Yerkes, which was set to work on the 15th of August last with perfect success, fully employed, if possible. This mill, with eight barrels, is capable of producing—in fact, even since it was set to work has reduced over 2,000 quintals of ore monthly, in every respect so to its working power surpassing even the expectations of the directors. Nothing, therefore, remains but to keep the mill at all events—if possible, even that also of Santa Anna, with five barrels, capable of reducing 1,000 quintals of ore monthly—well employed, to insure a remunerating profit to the proprietors. With a view to the promotion of this divisional order, and to commence the preparation of the consequences, tables at different times, before alluded to—all events, to give the new mill, which cost \$12,500 (paid), a fair trial—the directors now report that, in addition to the cost, which, in their report of last year, they intimated their intention to transmit to Graze, on the faith of the indemnity fund, to which \$60,000 more has since been added, in order to complete the new mill they have lately, on the 15th of February last, sent out a further credit of \$60,000, which, if enough of, will also have to be advanced, on the trustees' indemnity fund, until such time as the directors may deem it expedient to make a further call upon the proprietors.

The directors now submit the balance sheet of the company's accounts, from its commencement to the 31st December last, as required by the Dec't of Constitution, examined and attested by the auditors; and have now to report that S. Prior, Esq., and J. R. Mauds, Esq., two of the directors, and Thomas Starling Benson, Esq., one of the auditors of the company, are now in turn, by settled rotation, to go off of office, but, being eligible, now offer themselves for re-election to the office of director and auditor respectively.

Balance sheet from March, 1830, to 31st December, 1841.

Amount received for deposit and calls to 31st Dec., 1840 \$387,200 0 0

Cash received in 1841 for call of 10s. per share on Ass't shares, made on the 4th of January, 1841 2,675 10 0

Balance of profit and loss account on 31st Dec., 1841 1,067 11 6

BALANCE SHEET.
Commissioners in Mexico, for amounts transmitted from commencement of operations to December, 1841 \$350,947 16 5
General expenses 27,746 11 11
Furniture and furniture in office 100 0 0
Trustees' indemnity fund 5,000 0 0
Cash and petty cash in hand 117 12 4
Stamp for transfer, ditto 14 0 0

\$387,782 1 6

The CHAIRMAN then explained that all the dependence of the company was upon the barrel amalgamation; it was covering all expenses, and would yield a profit of \$20,000 per annum. The poorer ores would not do for it—they were obliged to concentrate them. To keep the mill in work they had been compelled to purchase \$22,000 worth of ore from the bushings; the thing was, with these men, if you gave them 2s., 3s., 4s., or 5s. per day, they would still only work in proportion to the amount they receive, and, as the company's own mines had failed off, their only hope now was from the purchase of ore from the native miners to supply for the mill. It was a painful position for the directors to be placed in; at the last meeting they had to explain to the proprietors the reason of a loss of \$17,000 for the year 1841; the reason was simply this—in 1840 the ores were rich, in 1841 they were poor. The attendance of the directors had been very close, and the interests of the proprietors had been carefully regarded—indeed, the directors' own interest in the company was too great for them to neglect it, they holding, although reduced in number, by the gradual failing off of their brother directors since the company had been in difficulties, from twenty-four to the seven or eight present, nearly one-third of the capital invested. It was determined that if the barrel amalgamation process could not support itself that the company should be dissolved as speedily as possible. If the accounts from Socorro were unfavorable a call of 10s. per share would be made, but, if favourable, there would be a slight chance of recovering the losses the shareholders had sustained. With respect to their present position, the stores were worth \$24,500, and the plant \$77,800, so that, in the event of the dissolution of the company, the liabilities would be covered, but, at the rate the mill was now going on, it would give a dividend of 10s. per share, although he was not sanguine enough to expect that result, but trusted that it might turn out well. A few questions being put by Mr. GODDARD, which were satisfactorily replied to by the CHAIRMAN, some conversation ensued as to the future prospects of the company, after which the report and statement of accounts was unanimously adopted.—It was then moved, seconded, and carried unanimously—"That Messrs. S. Prior and J. R. Mauds be re-elected directors of the company," which was carried unanimously, and Mr. Benson was re-elected auditor.—The thanks of the meeting were then unanimously voted to the chairman and directors, and Mr. Mauds (the secretary), for their zeal and attendance to the interests of the company, and the meeting adjourned.

PRESTON AND WYRE RAILWAY, HARBOUR, AND DOCK.

The half-yearly general meeting of the shareholders of this company was held at the offices, King William-street, on Saturday, the 20th ult.

Sir P. HESKETH FLEETWOOD in the chair.

The report stated that the directors being unable to issue any new shares, either at 50s. or 25s., upon the security of the company's funds alone, Sir P. H. Fleetwood had agreed to place his rents of Fleetwood in the directors' hands, to enable them to issue a sufficient number of new 25s. shares, the company guaranteeing a priority of 5 per cent. interest, as to arrange the floating loans and debts of the company. It further stated that the directors had appointed F. Cortazzi, Esq., managing director, at a salary of 300l. per annum.—The CHAIRMAN, in a brief speech, alluded to the general depression of trade in the manufacturing districts of the North, which he stated had not only affected their own undertaking, but also other railroads in Lancashire. The expenditure of the last half-year had been largely increased by the charge for maintenance of way, but the line had been recently ballasted with sea gravel, and the whole was being brought into excellent order. Though the receipts for the half-year had diminished, there was a considerable increase in the tonnage of vessels. There was every expectation of the West Cumberland line being revived, and of the rapid completion of the Bolton and Preston Railway, which would bring large accessions of traffic to Fleetwood. It was then resolved that the report and accounts be received and adopted, and that the new shares of 25s. each be issued in conformity with the recommendation of the directors. Seven directors were then elected for the year ensuing, and after a brief allusion to the advantages which the port of Fleetwood enjoyed over that of Liverpool, as far as a saving in the shipment of goods was concerned, which was estimated at about 6 or 7 per cent., a flattering vote of thanks was proposed and passed to the chairman and directors, and the meeting, which was finely attended, broke up.

POLBREEN MINING COMPANY.

A special general meeting of the shareholders of this company was held at the offices, 44, Finsbury-square, on Monday, the 26th ult.—E. CURRIVAN, Esq., in the chair.—The minutes of the last meeting were read and confirmed. The advertisement concerning the present meeting having been read, it was moved, seconded, and carried unanimously—"That the resolution passed at the meeting held on the 5th ult., recommending the dissolution of the company, be confirmed."—The thanks of the meeting were then voted to the chairman, for his conduct in the chair, and the meeting adjourned.

ANGLO MEXICAN MINT COMPANY.

The annual general meeting of the proprietors of this company was held at the office, 6, New Broad-street, on Tuesday, the 2d inst., but, of the nature of the business discussed, we, as well as the distant shareholder, must remain ignorant, as our reporter, on presenting himself, for the purpose of taking notes of the proceedings, was refused admittance. We cannot but regret that the directors, as managers of a public undertaking, should deem their transactions unworthy of publicity.

IMPORTANT INVENTION.—A trial was made at Liverpool, last week, of a new method of propelling steam-boats, invented by Mr. E. Finch, for which purpose a small steamer had been constructed at the engineering establishment of Mr. Rigby, at Hawarden; the experimental trip was performed in an satisfactory manner as to convince all parts that this new propeller is of great importance, and, when fully developed, will be generally applied to sailing-vessels as to steam-boats. The invention appears a simple contrivance; the paddles-blades are still preserved, but, instead of wheels, two plates are applied, the broadest parts of which are at their extreme ends, fixed obliquely at an angle of 20 degrees, one on each side of the vessel, at the ends of the paddle-shaft; these plates, or propellers, are made of wrought-iron, and appear very strong and compact, and about eleven feet long and 3 ft. 6 in. wide in the broadest parts: they are entirely out of the water twice in the revolution of the paddle-shaft, when the engine is in full motion, and here the deepest hold of the water when the engine is at half stroke, or at its greatest power. They thus set the ears, or walls, on back water is created, and the dangerous bending of the paddle-blades on the water, and subsequent vibration of the vessel, is avoided.

AMERICAN WELS AT GRANADA.—The sand and clay, which have so long rendered the water of the Arkansas well thick and muddy, appear to be completely exhausted, and for some weeks the flow has been uniformly as clear as well-dressed river water.

STATISTICAL NOTICES OF THE MINERAL DISTRICT OF PENNSYLVANIA, U.S.

We extract the following from the *Harrisburgh Register*, treating on the mineral district of Pennsylvania, the population of which is stated at 1,724,033 free people, while in 1790 it was only 434,373.—We have more than 20,000,000 acres of land, and under better cultivation than any in this nation, and consequently improving. It is worth at least \$700,000,000. We have more than 300,000 houses, worth \$300,000,000, and barns, workshops, stores, furnaces, forges, factories, and mills, worth \$200,000,000 more. Nor has our public debt been contracted for nothing. Our railroads and canals extend, not only to our coal and iron mines, but are designed to connect the waters of the great lakes, and the great Ohio and Mississippi Valleys, with the waters of the Delaware and the Chesapeake; they intersect the State in every direction, from west to east and from north to south. Including State and company works, we have more than 1000 miles of canals and 700 miles of railroads, completed and in operation, and costing more than 100,000,000 dollars. Some portions of these works are not yet profitable, in consequence of the unfinished links, and yet the tolls will this year, on the State works of about 700 miles, exceed a million of dollars.

The value of the anthracite coal mines upon the Schuylkill, the Lehigh, the Swatara, the Wisconsin, the Shamokin, the Susquehanna, and the Leckawanna, which are but just beginning to pour down their mineral wealth to the markets upon the ocean, is incalculable. In 1830 the trade commenced, and 300 tons were sent to market from the Lehigh. In 1832 the trade commenced upon the Schuylkill. The Schuylkill Canal was then finished. There are now about fifty-five miles of railroads, branching from the canal to the several mines, and forty-five miles of railroads underground. About 1800 cars are employed in conveying the coal from the mines to the canal, and between 800 and 900 boats are used in conveying the coal to Philadelphia. The arrivals of vessels annually in the Schuylkill for the conveyance of Schuylkill coal to other States, will number about 3100; 120 sloops, schooners, and barges, arrived in two days last week. The Schuylkill mines will this year produce more than 800,000 tons, and the other anthracite mining districts about the same quantity—making 1,000,000 tons, of which about 800,000 will be exported to other States.

The coal trade is but yet in its infancy, and increasing rapidly. The use of anthracite coal in steam-boats is taking the place of wood in the eastern waters, and will be used in the steamers of the ocean as the safest and cheapest fuel. It is also coming into use in driving machinery and making iron. The mines upon the Swatara are capable of producing as much as the Schuylkill, and so are those of the Lehigh, the Wisconsin, the Shamokin, and the Susquehanna; and the Schuylkill is capable of producing four times the amount that is now mined. Improvements will soon be completed to all these mining districts. What, then, will be the annual worth of the anthracite coal of Pennsylvania that will be carried upon her public works? But we have not only anthracite, but, according to our State geologist, more bituminous coal than all Europe. Our State coal intersects this bituminous coal-field in all directions. All Europe contains about 2000 square miles of bituminous coal land—Pennsylvania has 10,000 square miles, or 6,400,000 acres. It is estimated by our State geologist that the great western bituminous coal-field of Pennsylvania contains three hundred thousand millions of tons! Ten thousand times more than England, Scotland, Wales, and Ireland! This vast mineral wealth, without the public improvements, would have been dead capital for ever. According to the returns of the county commissioners in the Secretary of the Commonwealth, there was mined in 1838, in Pennsylvania, west of the Alleghany Mountain, more than 2,000,000 tons of bituminous coal. Not one ton of this reached the Atlantic market. About nine-tenths of it was consumed in domestic purposes at home, in furnaces and rolling-mills, and in driving machinery; one tenth, or 200,000 tons, were shipped down the Ohio and the Mississippi. What this trade will be when the great valley is filled with population, wealth, and refinement—when Western Pennsylvania becomes the manufacturing dependence of the Western States, can hardly be conjectured. Nor is this great bituminous coal-field entirely separated from the Atlantic. We have abundance of bituminous coal, the nearest in the United States, of any quantity, to Tide Water. The Virginia and Maryland mines, on the Potomac, are from 100 to 200 miles from shore navigation at George Town. The completion last year of the Tide Water Canal from Havre de Grace, in Maryland, to the Pennsylvania Coal, at Columbia, has this year, for the first time, opened a navigation for the bituminous coal of the Juniata, and the West Branch of the Susquehanna to the Chesapeake. It is estimated that the trade will this year reach 100,000 tons; the amount is unlimited which can be sent from these places on our canals to market. A railroad has been constructed, forty miles long, from the northern end of our coal basin to Coking, on the Chemung Canal of New York, leading into Seneca Lake; there are now six locomotives and between 300 and 400 cars on this road, conveying coal from our Blooming mines into the state of New York.

The quantity of iron produced in Pennsylvania is equal to about one-third of the product of the whole Union; her iron is superior in quality to any other. According to the remarks of the Hon. James Irwin, in a late speech in Congress, we had, in 1839, 310 charcoal furnaces, producing 90,320 tons of pig-metal, and 70,000 tons of this was converted into bar-iron by forges and rolling-mills; more than 15,000 workmen—together making 90,000 people with their families, consumed annually \$7,000,000 worth of agricultural produce and merchandise. The number has increased greatly since by the establishment of anthracite furnaces. The amount of bar and pig iron is now worth about \$7,000,000. According to the returns to the Secretary of the Commonwealth, there was manufactured, in 1838, 50,558 tons of castings in thirty-six counties, valued at \$3,000,000; add estimated value of cast-iron in sixteen counties, at least \$1,194,000, and the amount of bar, pig, and cast iron in Pennsylvania is worth \$14,000,000. A considerable amount of Jersey iron is made into castings and rolled into bars in Philadelphia, and a quantity of the pigs of the Western Virginia, Ohio, and Kentucky, are made into castings and rolled into bars at Pittsburgh.

To conclude, who does not feel proud of this picture of Pennsylvania? She has all the resources of a great nation within herself, for happiness in peace, for power in war. She is capable of maintaining 30,000,000 people within her borders, of feeding and clothing them herself, and making the surrounding States her tributaries. Her water-power upon the Susquehanna and her hundred branches, upon the Delaware and Schuylkill and their tributaries, and upon the streams that make the Alleghany and Monongahela, is capable of performing the labour of 400,000,000 men. What her steam power can do in her anthracite coal-fields, and upon her 10,000 square miles of bituminous coal lands, it is impossible to calculate."

INSTITUTION OF CIVIL ENGINEERS.

MAR. 3.—The first paper read was "An Account of the Tunnel between Bath and Bristol, on the Great Western Railway," by Mr. Nixon.—These works are more than usually interesting from the frequency of the tunnels, their large dimensions, and the rapidity with which they were executed; the details of the execution were given minutely, and the paper was illustrated by a very artistic drawing. After an animated discussion upon the prices paid for the various works, the deviations from the original line, and the comparative advantages of the different modes of working, Dr. Buckland described the geological formation of the locality, and pointed out the precautions which were necessary in driving tunnels through various kinds of rocks; in the stratified rocks, excavations coal be made with perfect safety, but in those whose strata or lines of cleavage approached the vertical, greater attention was required; whilst in the shales, sandstone, marl, lime, and similar formations, the danger was even more decided, and it was mentioned that in tunnels through such strata, unless they were bored with masonry throughout, even the vibration arising from the passing of the locomotives and carriages, might cause considerable danger by the sudden fall of portions of the roof. The landslip caused by the accumulations of water or by unequal pressure were alluded to, and the more intimate connection between engineers and geologists was insisted upon as most advantageous for both parties.

The next paper was "An Account of the Railways connecting between Liege and Verviers," by Local O'Field, an engineer officer in the service of the East India Company, who, in a tour through Belgium, enriched his note book with remarks and sketches on provincial subjects, whence he had drawn the materials for the paper. It described the general course of the railways descending by the line indicated above from the height above Liege to the valley of the Meuse, its progress along the mountain banks of the Vierre, through tunnels, and over almost insurmountable bridges and viaducts to Clodfontaine, and thence onward through the busy town of Verviers to the frontier of Germany towards Aix-la-Chapelle. The mode of excavating the tunnels, and the materials used in the other works on the line were accurately described; the general accidents and events of the road, the rains, floods, and methods of fastening them to the sleepers, and the prices of labour and materials, were all given in detail, and the whole was illustrated by engraved diagrams from the author's sketches.

MACHINERY.—*Globe-printer v. Society.*—At the monthly meeting of the members, held at their rooms, on the 29th ult.—Eaton Hutchinson, Esq., F.R.S., in the chair—after several presents, of epistles, &c., from foreign scientific institutions had been presented, Mr. Birrell and a communication (by R. Hawkesworth, Esq., of Ormskirk). "On the Influence of Temperature on the Weight of the Atmosphere," to which we shall give in notice in an early Number. The thanks of the society were voted to the donor, and also to the author of the paper, which appears to be of an important character, and likely, from the hypothesis therein started with respect to the alteration in the temperature of the atmosphere, to afford an explanation of some geological phenomena of which no satisfactory explanation has hitherto been given.

IMPROVED METHOD OF OBTAINING METALS FROM ORES.

[Specification granted to Anthony Theophilus Merry, refiner of metals, Birmingham, for an improved process or processes for obtaining zinc and lead from their respective ores, and for the calcination of other metallic bodies.]

This invention consists in applying the heat arising from the converting of pit-coal into coke, to the purposes of calcining, roasting, and smelting the ores of zinc and lead. To accomplish this, the coke-oven is connected at the back by a flue, with a subliming-furnace; from the back of which a flue leads to a reverberatory-furnace, and from the back of this furnace another flue proceeds to a chimney. The subliming pots are twenty-four in number, and their lower ends are inserted into condensing pipes, which dip into vessels containing water, to receive in drops the condensed vapours of the zinc. The ore of zinc (i.e. the carbonate and sulphate of zinc) are, in the first instance, converted into an impure oxide of zinc, in the following manner:—The carbonate of zinc, after being reduced to a coarse powder and washed, is exposed in a reverberatory-furnace, for five or six hours, to a strong red heat (being occasionally stirred with an iron rake), which decomposes the carbonate, and produces an impure oxide of zinc. The sulphate is coarsely pulverised, and washed, and calcined for twenty-four hours, in a reverberatory-furnace, being stirred every half-hour. During the first six hours it is exposed to a very low heat, which, for the remainder of the time, is increased to a strong red heat; and at the end of the twenty-four hours the sulphate will be decomposed, and an impure oxide of zinc produced. The following is the mode of converting the impure oxide of zinc into a metallic state:—A fire is first made in the coke-oven, and small quantities of coal are added, until the subliming pots are made red hot by the flame, heated gases, &c., that pass from the coke-oven into the subliming-furnace, and from thence proceed through the reverberatory-furnace into the chimney. The oven is then cleared out, and charged with the zinc oxide to be made into zinc; and at the same time the subliming-pots are charged with the oxide of zinc, mixed with powdered charcoal, coke, or other carbonaceous substance, in the proportions of one part, by weight, of charcoal, to three parts of the oxide; the opening at the bottom of each subliming pot being stopped up by a piece of coke or charcoal, to prevent the charge from passing through. In about twenty-four or thirty hours the zinc will be converted into zinc, the zinc in the subliming-pots refined, and the zinc sublimed. The sublimed zinc is then collected, and the subliming-pots and coke-oven are cleared out and recharged; after which the above process is repeated. The flame, heated gases, &c., from the coke-oven, pass through a calcining-furnace, in the same way as they pass through the subliming-furnace. An ordinary smelting-furnace is employed for smelting lead, or, it being connected, by a flue, with a coke-oven, in the same manner as the subliming-furnace, and for the same purpose.—The patentee claims the application of the heat, arising from the carbonisation of pit-coal, to the calcining, subliming, or smelting the ores of lead or zinc, let the apparatus or process, combined therewith, be what it may; and likewise the combination of furnaces for the calcination of the ores of other metallic bodies, besides those of zinc and lead.

ELECTRO-MAGNETISM AS A MOVING POWER.

The Consul-General of the Netherlands, in a communication dated the 18th ult., thus announces the removal of the hitherto great obstacle to the practical application of electro-magnetism as an effective propelling power:—"A private gentleman, Mr. Elias, of Haarlem, has just published the description of a new machine invented by him, for the application of electro-magnetism as a substitute for steam. The object of the inventor has been chiefly to remedy the defects which, in 1839, rendered the otherwise ingenious invention of Mr. Jacobi, of St. Petersburg, a total failure, in as far as practical utility is concerned. Those defects originated, it seems, in the erroneous supposition that the power of the magnetic bars exclusively resides in their extremities—whence the term hitherto given to all electro-magnetic machines—viz., that of a horse-shoe—which, while it occasions an unavoidable interruption of the magnetic stream at each new inversion of the poles, at the same time leaves the power resident in the remaining part of the bars wholly unemployed. The new invention of Mr. Elias, on the contrary, has the very great advantage of rendering effectual the full power of the magnetic stream uninterruptedly, and throughout the whole body of the apparatus. This consists of two concentric rings of soft iron, standing on the same plane, of which the external one is immovable, while that on the inside revolves round its own axis. By means of a piece of copper wire, wound about each of these rings, he has given them six magnetic poles, placed at equal distances from one another, the whole being so contrived that the one ring exerts its inducing power on the other throughout the whole circumference, and always at the same distance. A small, but very perfect, model of this important invention is now open to public inspection here; and the result of its operation is allowed, by those skilled in such matters, to be such as to ensure the most triumphant success."

WILLIAMS'S ARGAND FURNACE.

The smoke nuisance, at length, we are happy to say, bids fair to be, in some measure, abated—at least, where public spirit or individual enterprise may induce the introduction of a perfect and economical remedy. The great popularity and extended application recently obtained by Mr. C. W. Williams's ingenious process, must be highly gratifying to that gentleman, as well as to all interested in the abolition of an intolerable nuisance. As regards steam navigation, we noticed, in our last, the successful use by the directors of the Dublin Steam Company, in their new vessel *Prince*, and we have now, with reference to manufacturers, to record its introduction into Scotland—a public inspection of one of the furnaces just erected at the extensive works of Mr. A. Harvey, Greenhaugh, having taken place a few days since, when, we understand, about thirty intelligent and scientific gentlemen inspected the smokeless furnace in action, which was erected by Messrs. Ducke and Co., of Manchester, under the superintendence of the engineer of the works, Mr. Wm. Baile, and "all parties (among whom were the town clerk and several other public authorities) expressed themselves highly gratified with the exhibition, ably and practically illustrating a system which, there can be little doubt, is based on correct scientific principles. Mr. Harvey's furnace affords an excellent example of the efficacy of this adaptation of chemical principles to the perfect combustion of coal on the large scale, eight holes being placed to observe the internal action of the furnace during the using and stopping of the plenum air-distributing apparatus. As a common furnace, the chimney emitted a dense cloud of smoke, and the flues were as dark as the eight holes were rendered gaseous; but, on admitting rather more than 1000 jets of air to the smoke coal gas, ignition immediately took place, the whole was inflamed under the boiler, the flues were suddenly light, and

MEETINGS OF SCIENTIFIC BODIES.
IN THE ENSUING WEEK.

SOCIETY.	PLACE OF MEETING.	DAY.	HOUR.
Royal Botanical	Regent's-park	Saturday	4 P.M.
Royal Geographical	5, Waterloo-place	Monday	9 A.M.
Medical and Chir. Soc.	Old-court, Fleet-street	Monday	9 P.M.
Royal Medical and Chir. Soc.	Berners-street	Tuesday	9 P.M.
Civil Engineers	25, Great George-street	Tuesday	9 P.M.
Geological	47, Pall-mall	Tuesday	9 P.M.
Botanical	27, Berkely-street	Wednesday	9 P.M.
Graphite	Thatched-house Tavern	Wednesday	9 P.M.
Royal	Somerset-House	Thursday	9 P.M.
Astronomical	Somerset-House	Thursday	9 P.M.
R.S. Society of Literature	St. Martin's-place	Thursday	9 P.M.
Royal Astronomical	Somerset-House	Friday	9 P.M.
Royal Institution	Albemarle-street	Friday	9 P.M.
Mathematical	Cripp's-street, Spirited-fields Battersea	Saturday	9 P.M.

PUBLIC COMPANIES.

MEETINGS.	MAY.
West Wheel Jewell Mining Ass'n.	21, Thredbo-lane street
Croydon Railway	London Tavern
Imperial Continental Gas Ass'n.	7, White Hart court
National Provincial Bk. of England	12, Bishopsgate street
British Iron Company	London Tavern
Devonshire Mining Association	9, Wardrobe court
Provincial Bank of Ireland	47, Old Broad street
Australian Agricultural Company	11, King's Arms yard
St. John's Bay Mining Company	Tokenhouse yard
North Cornish Iron and Coal Co.	44, Finsbury-square
Imperial Bank	Oxford-street Coffee-house
Chorlton Mining Company	46, Finsbury-square
Imperial Brazilian Mining Ass'n.	Winchester House
Commercial Steam-Packet Co.	London Tavern

CALLS.

May 16.	Bir C. Price, Bart., and Co.
21.	London and Westminster Bk.
21. August 2.	London Joint-Stock Bank.

DIVIDENDS.

May 12.	10s. per share	27. Austinfriars
Imperial Brazilian Mining Ass'n.	12s. per share	Winchester House

NOTICES TO CORRESPONDENTS.

"A." (Hastings).—Our columns are now, as they ever have been, open to the expression of opinion, whether in connection with mining, railways, or other public undertakings; any information, therefore, forwarded by our correspondent, calculated to be of interest to the public or the shareholders, and duly authenticated, will meet with every attention.

"T. G."—The work allotted to my Dublin correspondent has not reached us. We shall be at all times happy to hear from him on subjects he may consider of importance to our readers.

The table of Sales of Copper Ores in Cornwall, from 1st January, 1841, to 28th April last—intended for our present Number, is, together with many other important papers, unavoidably postponed.

We have this week again received several letters in reference to our Share List.—We are obliged for the list of Cornish and Welsh mines furnished by "A. H." many of which, however, can only be considered as private understandings, therefore inadmissible; the others shall be included in an amended list, which will be ready by next week.—The letter to whom we are indebted for our weekly correspondence, written in allusion to the notice inserted in our last—"The price I furnished for Corn Brass was 11d., which was quite correct, and the latest price obtained. Your correspondent has sold for 1s. It must have been a private transaction. It must be allowed that mining shares are subject to great fluctuations, and long intervals take place in some mines without any bargain being made, which may account for any apparent anomaly in the prices."

(Bromont) "A. M." (Brixton)—"Mr. C. Head"—"An Adventurer"—A. T. J. May—M. W."

To AGENTS AND CAPTAINS OF MINES.—The Editor will feel much indebted to Capitains, and other Agents of mines, abroad and at home, by the transmission of specimens of ore, labelled with the local designation of the mineral, and also the name, with the view of placing them in a collection, now being formed, having for object the classification of the several minerals of the various districts—allowing thereto such statistical information as can be acquired. Please, no notices of mines, with particularities as to the direction and number of veins, with notices of leases, cross over as faults, &c., will be highly acceptable, and will be placed in order, to which reference may, at any time, be made by the contributors. It is proposed, from time to time, to give papers, treating on particular districts, in the columns of the Journal, with an illustrative plan, or section.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, MAY 7, 1842.

A third Tariff has been brought forward by her MAJESTY's Ministers, and, so far as regards ores and metals, it will be found that it is more destructive in its consequences than the second—which was to the Mining Interest even more injurious than the first. It is difficult to understand the object, or the nature of the proceedings of Ministers, who have been put in possession of such "facts and figures" as could not allow them to "go right." The first Tariff imposed a duty of 5 per cent., ad valorem, on the value of the ores imported. This was no protection, while it was an admitted fact that 1s. 10s. to 9s. per ton on copper was the advantage obtained by the foreign miner smelting his ores in this country in bond. Upon representations being made to her MAJESTY's Government, showing the injury which such proposed measures would inflict upon our home mines, and, further, Ministers availing themselves of the counsel and advice of Mr. Alderman THOMAS and others interested in foreign mines, they were induced to alter the rate of duty to 1s. 10s. per ton on metal contained in the ores under 14 produce, and 1s. per ton on all above. This is the protection (1) granted to the Mining Interest of the United Kingdom, by which direct employment in the mines alone is afforded to at least 70,000 to 80,000 individuals (who, with those indirectly employed, including their families, may be said to embrace a population of at least 500,000), are solely dependent on the working of the mines—the greater part of these must necessarily be thrown idle if the proposed measure of Ministers be carried into effect, and who, having no other means of employment, must alone depend upon the provision made by the Legislature, as regards the Poor Laws, for their subsistence.

It would, however, appear that even this amended Tariff was not sufficient to satisfy those who had the ear of the Minister, as Government, either from want of information, or some other cause which it is not for us to define, thought fit again to amend the proposed Tariff as follows, and which we presume is, after a month's deliberation, to be considered as the result of Ministerial wisdom—

Those not exceeding 10 per cent. produce... 1s. 10s. 8 per cent. of metal

10s. 10s. 8 per cent. of

surance and other charges, 20s.—this would give 6d. 10s. per ton. If, then, we take this ore at the price named in the article referred to, we shall find that it will leave a profit of 30s. per ton.

We may be asked—Why, then, should not these ores have been brought to this country under the present law (no duty being imposed), if that they can be rendered profitable? Our answer is simple—it would not be worth the while of the foreign miner to raise ores which should only yield, on an average, 10 produce, but, inasmuch that, in raising ores of higher produce, he must necessarily bring to grass those of lower produce, which are separated, the inferior being left as halvans; it becomes to him a matter of consideration, whether, by altered circumstances, he may not import those ores which have been heretofore treated as being valueless, so as to yield a profit of themselves, or so as to reduce the duty, according to the sliding scale, as shown in the case of the Cobre Mines—from which it is clear that, even if the ores of 9 produce can be imported at the cost above taken, or even that obtained for them here, a saving of 2s. per cent. upon the duty can be effected.

Another point, and not less important for consideration, is that, although the profits of the Cobre Mines last year yielded to the adventurers £120,000, yet the amount divided in the four preceding years was only £127,200, or 31,800*l.* per annum; therefore, taking this with the Santiago Mines, the produce of which, for the first four months of the present year, is double to that for 1841, it must be clear that ores of low produce, to a considerable extent, have been accumulating of late—that the mines have become more fully developed—the cost of establishment and general charges reduced—and, further, the "fact" that, up to a late period, no ores under 14 produce ever appeared in the Ticketing Paper, whereas the sales on 6*th* ult., from the Cobre Mines, included 861 tons of ore under 12 produce.

There is also another cause to which the introduction of low produce ores may be ascribed, as holding out a boon to the foreign miner. The difference in price of foreign copper, or that obtained from foreign ores, and smelted in bond, but exported—and that of British cake copper, which, as we have shown, is from 9*l.* to 10*l.* per ton. Now, on ores of 10 produce, this would be equal to 20s. per ton; but, supposing the produce of foreign ores to come into our home market, and compete with native produce (assuming the present prices to be maintained), it is clear that the advantage offered to the foreign miner, on ores of 10 produce, is 20s. per ton, from which, however, is to be deducted the proposed duty; this, according to the amended Tariff, would be 30s. on the ton of metal, or 3*s.*, we will say, on the ton of ore—thus leaving 1*s.* per ton in favour of the foreign miner. We think we have said enough on this point, while the admixture of these poorer ores with those of richer produce, as shown in the instance of the Cobre Mines, the advantage would be 3*s.* per ton.

We now approach a subject which we must treat rather tenderly—we refer to the movements of the Cornish committee, or delegation. The letter of Mr. TREFRY, in our columns of to-day, at once expresses the opinion that gentleman entertains on the subject of the Tariff, but we have reason to believe that others of the committee are disposed to compromise with Government, and have determined on a scale of 2*l.* 10*s.* per ton under 10 produce, 5*l.* from 10 to 20, and 7*l.* 10*s.* above 20. It is hardly necessary to say that this is no protection, for, as we have already shown, under the proposed Tariff, the protective duty would be 4*l.* 16*s.*, while all that they would ask is 5*l.*, and which those conversant with the subject must be convinced is to sacrifice our home mines. It yet remains to be seen whether the lord, the adventurer, and the working miner, will allow the Tariff to be carried in its present form.

Our remarks have been carried to an unexpected length, but it is necessary we should notice the alteration in the duty on tin ores, which have been increased from 20s. per ton to 30s. per ton. We have not space to enter on this question, but will next week be prepared to show that this is but an imperfect protection; the interest, however, is one comparatively insignificant to that of copper, to which our limits necessarily confine us.

We again repeat the words in which we concluded our remarks of last week, in addressing the working miner—"Miners look to yourselves, act for yourselves, and be not cajoled or deceived by those who should be your advocates and friends, but who, in many instances, are but 'wolves in sheep's clothing.' " We stated that there was "nothing to hope—but all to fear;" that "a sliding scale" would be introduced; and that a change, if any, would not benefit the miner. The result has proved we were correct.

The affairs of the Talacre Coal and Iron Company, and the movements of Mr. Ald. THOMAS WOOD, the vendor, purchaser, chairman, and solicitor, of that notoriously fraudulent-concocted company, have, of late, escaped the Editorial lash, from the subject of the Tariff having principally engaged our attention. Certain matters which have come to our knowledge, however, require prominent notice, and, as certain gentlemen, "learned in the law," are this day called upon to show cause why Mr. Ald. THOMAS WOOD should not be struck off the Rolls as an attorney, and that the legal functionary is also required to show cause why he should be considered as a man of character and probity, it is well that we should afford some space to noticing the matter. As the case, however, is, in all probability, being argued at the moment of our Journal going to press, we must, on subject of the question at issue, defer any comment until next week. We cannot, however, allow one matter to pass by unnoticed, as it will act as a caution to others who may unfortunately, as in the case of Mr. CHAPFELLOW, be mixed up with a set of swindling projectors. The facts are briefly told:—Mr. CHAPFELLOW, ignorant of the demerits of the concern, or its concoctors, was induced, in common with others, to embark a considerable sum as an "investment" in the purchase of shares. One of the early acts of this gentleman was to attach his name to a number of bills for the assumed purchase money, one of which was for 4000*l.*, or thereabouts, in favour of Mr. LEVISON, a gentleman who was nominally the vendor of the property, to which Mr. Alderman THOMAS WOOD was also a party, as chairman, but who, on account of his partnership as a solicitor with Mr. ELLIS, declined attaching his signature—the other acceptors being Aldermen HYNDMAN and HODGES, as also Mr. CLOUTON, of Dublin. The bill, in due course, was passed to the Cheltenham and Gloucestershire Banking Company, who, on finding that there were no assets, took legal proceedings for the recovery of the amount. The demand was resisted, on the ground of conspiracy and fraud, but the law—and who shall contravene its dictum—declared that Mr. CHAPFELLOW, as a director of the company, was liable, and as that gentleman was the only party from whom any thing could be expected—for we believe the Dublin gentleman had managed, one by leaving the country, another by assigning his property, and the other having nothing to assign, satisfied the bank that there was nothing to get from them—he was "pounced" upon, a docket struck, and fast issued, the consequence being that gentleman placed in "durance vile," his occupation of his present apartment in the Fleet bearing date from the 13*th* ult.

We cannot imagine a case more heartless than that under notice, as regards the concoctors of this notorious scheme, and only regret that Mr. CHAPFELLOW had not brought to the bar of the Old Bailey those who have thus subjected him to the reverse of fortune, which, while it is our duty to record, we sincerely lament, not only for the sake of the injured party, but the injury such acts are calculated to do to honest enterprise.

THE NEW TARIFF—THE MINING INTEREST.

We have to direct the attention of all interested in mines—and more especially the working miner—to the following letter, addressed by Mr. Trefry to the Lords and Adventurers in Mines; as also the copy of circular which has been forwarded by that gentleman to the several mining districts, and on which we have offered some observations in another place. Our words will, doubtless, be remembered, that "we had all to fear—nothing to hope."

TO THE LORDS AND OTHERS INTERESTED IN CORNISH MINES.

The arduous and unceasing labours of your delegation, when in London, to memorialise Ministers for increasing your protection against the threatened ruinous competition with rich foreign ores raised by slaves, to the prejudice of the British miner, having been unattended with the hoped for favourable results, I, for the purpose of obtaining the necessary facts to strengthen your case, sent a circular throughout the whole mining districts of Great Britain, hoping, that the facts collected by that circular would dispose Ministers to give to us the required protection; but they, without waiting for further information, have published their amended tariff, which is less favourable to the British miner than that which we discussed at Redruth.

I, therefore (having only by this night's post received from London extracts from such tariff), give notice, without having time previous to the publication of this week's county papers for consulting with my colleagues, lately chosen by you at Redruth, as your committee and delegation, that it is my intention to request them to join with me in giving an early notice of the day and place where we will render to the mining interest of Cornwall an account how we have discharged our duties, as representatives of that interest, whilst in attendance on Ministers in London, and I tender as an excuse for my presuming thus to introduce myself on the public, my firm persuasion, grounded on well-considered facts, that the great mass of the people employed by me, in mining and other works connected therewith, will, with their families—altogether exceeding 10,000 souls—be, at no very distant period, deprived of their employment, and become destitute of the means of getting their living, should the existing legal safeguards of the British miner, under the sanction of which he has embarked in the hazardous enterprise of mining millions of money, be broken down, and become annihilated by the present tariff.

I am, gentlemen, your's, &c., &c.,

Place, Fowey, May 4. JOSEPH THOMAS TREFRY.

P.S.—Mr. Trefry hopes that agents of mines will now see the necessity of immediately completing and returning to him their answers to his circular, and be careful neither to omit the outgoings in the shape of parochial rates, nor the value of the materials, engines, buildings, &c., on the mines.

BRITISH MINING INTERESTS.

Circular addressed to all interested in the Preservation from Destruction of the British Mining Interests, of the proposed Commercial Tariff relating to Metals and Minerals to be adopted without very material Alterations.

SIR.—To save the British mining interests from the threatened destruction, its importance to the country cannot be known too soon; and, to obtain the necessary information, I would suggest that the managing agent of every mine in the kingdom should immediately prepare a general statement of her outgoings and returns for the last three years, ending on the 31*st* of last December, showing, by such statement, not only the profit and loss account, but the number of hands employed, and the probable value of the machinery and materials on the mine, as working machinery. It would also be desirable to know the annual consumption of coals, candles, gunpowder, iron, oil, tallow, and some other of the principal articles of mines' consumption used in each mine. On somewhat similar evidence, the late Mr. Pitt granted the drawback on debenture timber for mines in Devon and Cornwall; and, with similar evidence, we may now prevent that boon being taken away, as well as obtain sufficient protection against the rich foreign ores raised by slaves, to the starvation of the British miner, and to the great detriment of those connected with him, as merchants, manufacturers, tradesmen, shipowners, proprietors of collieries, founders, carriers, smelters, &c. &c.

If, for Cornwall and Devon, the returns be made to me, I will, without delay, make the proper use of them for the purpose required, without making public any particular return, should the parties sending the same wish their contents to remain private.

For Ireland, I have no doubt but that Mr. Pardy would undertake the task; and for Derby, and other counties in England, Scotland, and Wales, I would propose that such returns should be made through one of the members for each county, and be transmitted by them respectively, as well as Mr. Pardy's returns, to the *Mining Journal* Office, 37, New Broad-street, London.

In those returns I would include all works raising metals, minerals, semi-minerals, sulphur, manganese, clays, &c.; but, where the works have not been in working so long as three years, the accounts should begin from their commencement, keeping each year separate; and to facilitate the accomplishment of this plan without delay, I herewith take the liberty of sending to you, as principal agent of a mine, or work, the subjoined skeleton form, which you will be able to fill up without much trouble.

Place, Fowey, April 27. J. T. TREFRY.

MINES' EXPENDITURE, RETURNS, &c.

Name of the mine.	Description of mine.	Where situated.	1840.	1841.	1842.
<i>Ores raised in the year specified</i>					
Coals consumed					
Iron					
Steel					
Cordage & hemp					
Candles					
Tallow					
Gunpowder					
Nails					
<i>Provisions for ores sold, including carriage</i>					
Outgoings					
Dividends declared (profit)					
Cattle					
Paid for coal, including carriage					
Iron					
Steel					
Cordage & hemp					
Candles					
Tallow					
Gunpowder					
<i>Including also in the form—barrels, pails, iron chain, rails of various descriptions, boundary hills, castings, debenture timber, American red and yellow pine, American and English oak, birch and other timber, cedar, lime, pitch and shingle, hogsheads, engine shafts and galleries, and oil, rags and other articles, various other articles, also specimens showing the total number of persons, of all descriptions, employed at present, and the estimated value of machinery and materials now on the mine, and the returns to be signed by the person or head manager, and which form are to be obtained on application to J. T. Trefry, Esq., Place, Fowey, or to Mr. H. English, Esq., New Broad-street, London.</i>					

THE NEW TARIFF.—Sir R. Peel announced, in the House of Commons, yesterday, that he meant to introduce the Tariff Bill on Tuesday next.—Many petitions have been presented, during the week, against the proposed export duty on coals, as also the reduction of the duty on the importation of foreign metals; and Mr. E. Turner, after presenting the petition inserted in another column, last night, gave notice, that, considering it to be of great public importance, he would move, on Monday next, that it be printed and circulated with the vote of the House.

THE COAL TRADE.—A deputation, including Mr. F. Mills, Mr. L. Murray, and Mr. J. Bowes, on behalf of Redruth Colliery, had an interview with the Chancellor of the Exchequer on Tuesday last, at his official residence in Downing-street.

ORIGINAL CORRESPONDENCE.

THE NEW TARIFF—THE MINING INTEREST.

TO THE EDITOR OF THE MINING JOURNAL.
SIR.—"A Committee for the Protection of the British Mining Interest" is a very high-sounding title, but I am very apprehensive that the views entertained by the "committee," in reference to the alterations proposed to be made in the tariff, and the proceedings they have thought proper to adopt in opposition to the measures of the Government, are much more calculated to prejudice the "mining interest" than to protect it, especially if we may judge of those views from the letter of Mr. Johnson, in the *Mining Journal* of the 30*th* ult., and which, from the connection that has subsisted throughout the whole proceedings, between the writer of that letter and the committee, may be assumed to be the fact.

I copy the following extract from Mr. Johnson's letter, as being a part that requires some explanation, and which, I must confess, I cannot clearly comprehend:—

"The British mines, of the metals alluded to (copper, tin, lead, &c.), cannot be worked if there is not a protecting duty imposed on foreign produce equivalent to the local advantages given by Nature, and the enterprise of our capitalists and population. The amount of this protection must, of course, depend on the proportionate production of the mines of various metals in our own country, and the abundance and certainty of supply of foreign produce, so as not to interfere with the manufacturing or other interests of the nation; but the produce of our mines, if such protection is given, will always be sufficient to supply our home consumption, and thereby prevent the injury to our mining, manufacturing, and trading population, by our becoming dependent on foreign supply, and render England a mart for, and regulator of, prices to other countries."

I would remark, first, that the object of Ministers is to bring all the copper ores of the world, or as far as this can be done, to this country to be smelted—so I have been given to understand—and they are anxious to avoid their being driven to other countries for that purpose, by an excess of duty being levied upon them in this country; and, therefore, it is, that they do not quite fall into the views of the British miners' protectors, as to what that amount should be. But, in the next place, what are we to understand by "the protecting duty being equivalent to the local advantages given by Nature," &c.? Mr. Johnson, in a subsequent part of his letter, observed "that the advantage this country possesses over others is 8*l.* 8*s.* 9*d.* per ton on the "metal produced," and "that as long as this protecting duty is allowed there will be no fear of competition by foreign rivals." This is a very important admission, and must, I should presume, exercise a very great influence in scaring away some of the phantom that have intruded themselves upon the imaginations of the "protectors," for it must be borne in mind, that the Ministers have proposed a protection equivalent to an average of 5*l.* per ton, and if there be nothing to be alarmed at but the 3*l.* 8*s.* 9*d.* above the 5*l.*, we may as well make up our minds at once that the British mines will not be ruined, nor the British miners be sent all over the world to seek employment. If this sum of 8*l.* 8*s.* 9*d.* per ton of metal be the amount of duty that Mr. Johnson thinks would be "equivalent to the local advantages given by Nature," &c., it would, of course, be a fixed duty of that amount. How, then, can it be made dependent upon the proportionate production of the English and foreign mines? which would involve the question of a variable duty. This puzzles me very much, and I should like to see it explained. Mr. Johnson adds, that "the produce of our mines, if such a protection is given, will always be sufficient to supply our home consumption." This observation would seem to imply that his intention, after all, was to secure the home market, by a prohibitory duty, to the home mines; and, even if he could do this, what would become of the 8000 tons of copper now annually exported out of the 12,000 tons produced? If this be not his intention, how would the foreign ores, which would be brought to this country to be smelted at the duty of 8*l.* 8*s.* 9*d.* per ton of metal, be prevented from competing with the produce of our mines in the home market?

I now come to Mr. Johnson's figures, which he has put together for the purpose of showing that ores of 20 produce, mixed with an equal portion of ores of 7*l* produce, will give an average produce of 13*l.*, and that, by this mixture, the copper would be introduced into this country at a less amount of duty than if they had not been so mixed. All this is correct, as far as the figures go, to an explanation of the subject; but the principal facts are kept out of sight, and, if introduced, they would have upset all Mr. Johnson's results. With your permission, we will throw a little light upon this subject, and the question I would propose is—Can ores of 7*l* produce be so brought to this country, except at a considerable loss; and, if they cannot be brought separately, which I will now prove to be the case, can they, by being mixed with ores of a higher produce, without incurring an equal loss? The duty proposed to be charged was 2*l.* 10*s.* per ton on all copper produced from ores of 14 per cent. and under, and 5*l.* per ton on copper from ores producing from 14 to 20 per cent., and Mr. Johnson's mixture is intended to bring the whole below 14, so that it be brought in at the lowest duty. Let us see what will be the effect of this mixture.

In the *Mining Journal* of the 2*nd* of April you gave a statement of the cost and charges of bringing a ton of ore to the English market, which amounted to 8*l.* 10*s.* per ton. Now, those charges are just as high upon poor ores as they are upon rich ores. Ores of 7*l* produce will sell at Swansea, at the present standard, at about 6*l.* per ton; I mean ores of British produce, which is giving every advantage to the calculation in favour of the foreign mines. Thus, there would be a loss of 2*l.* 10*s.* per ton incurred in bringing ores of 7*l* produce to market. Now, the proportions of ores of each quality that could be mixed to the greatest advantage to the seller would be 3*l* tons at 20 produce, 70; 4 tons at 7*l* produce, 30—100; and in this mixture there would be incurred a loss of 2*l.* 10*s.* per ton on four tons of ores of 7*l* produce, amounting to 16*s.*, and a saving of 10*s.* per ton duty on 3*l* tons of 20 produce, amounting to 35*s.*, or a positive loss upon the ton of copper thus produced of 8*l.* 8*s.*; to which must be added the duty on the four tons of poor ores, at the rate of 2*l.* 10*s.* per ton on the copper contained in them, and which on this quantity amounts to, in round numbers, about 1*s.*, making the whole loss to be 8*l.* 10*s.* upon the ton of copper. Now, do you think that any benefit can arise to the mining interests by such statements being addressed by Mr. Johnson to Lord Ripon? or does Mr. Johnson really believe that his lordship and the rest of his Majesty's Ministers are so thoroughly ignorant of the facts, as to suffer themselves to be imposed upon by such calculations? Mr. Johnson has even gone so far as to assert that "rubbish" might be used with the rich ores for the purpose of lowering the produce; but I do not know a better term to apply to such a view of the question than that he has adopted in his mixture.

With regard to his observations upon tin, they appear to me to involve the same kind of contradictions. Mr. Johnson overlooks the fact of our being exporters to a very considerable portion of the tin produced by our mines annually, and that the quantity so exported, or a large portion of it, is met by foreign tin in the foreign market. He says that England always has been, and will be, a regulator of prices to the world as long as her mines are at work, but has this really been the case? If so, how has it happened that for many years there have been such complaints against the price, and such losses incurred by the tin trade and the tin mining interests? We are informed, in one sentence, that unless the English miners be sufficiently protected to enable them to compete with the foreign miners, they will be destroyed, of course, by the low price of the produce; and, in the next, we are gravely assured, that the manufacturer will be ruined by high prices. Surely these two effects cannot be produced by the same cause—that of want of protection to the English miners. If the foreign can overwhelm the market, how has it happened that he has not

nearly 4000 persons were thrown out of employment by the protecting duty on foreign metal, being removed for the introduction of Spanish lead;" I venture to say that his lordship remembers no such thing, and, for the best of all possible reasons—that such a thing never took place. Lord Ripon may, and no doubt does, recollect that some years ago the price of lead was greatly depressed, and continued to be so for several years; but his lordship will also recollect that it did not arise from the removal of the protecting duty on foreign metal, nor were nearly 4000 persons thrown out of employment by our mines ceasing to work. There was, I admit, a good deal of distress for a time in the lead mining districts, at least in many of them, but if Mr. Johnson would take the trouble to inquire into the true cause, he would find that it did not arise from the Government having lowered the duty on the importation of lead and lead ore, but that it was occasioned by a circumstance over which they could exercise no control; and it appears to me questionable whether we should have experienced so much depression in the price of lead if the foreign miner had been encouraged to bring his ore to this country to be smelted, by which there would have been less competition in the foreign market, upon the same principle as that advocated by Mr. Johnson, of converting this country into a mart for the supply of the world.

There was a letter in the *Mining Journal* of the 9th of April last, by "A North Country Reader," upon this subject, in which the author of it gave the quantities of metal and ore imported into this country at stated periods, so dividing the time as to make the fluctuations in quantity to agree with the alterations in the duty, which, although it contains, as far as it goes, the truth, does not give all the truth, and is, therefore, calculated to produce a wrong impression. A stranger to the facts would be led to the conclusion that the lowering of the duties had led to a large increased importation, and that the price of the produce of our mines had suffered from it. I give you the following table which will enable your readers to understand the question better.

The following are the particulars of foreign lead and lead ore imported into, and exported from, Great Britain, from the years 1820 to 1840, both inclusive, and also of British lead annually exported during the same period:

Year.	Foreign lead imported.	For lead exported.	For lead imported.	British lead exported.	Price of lead in London.
	Tons.	Tons.	Tons.	Tons.	Per ton.
1820	4	—	19720	4720	12 10
1821	—	540	17400	21 0	12 10
1822	79	92	16000	21 0	12 10
1823	202	200	12914	22 0	12 10
1824	712	741	191	2091	21 8
1825	416	516	1648	20 0	22 8
1826	604	647	1181	21 0	10 10
1827	2164	2101	1676	19 10	17 10
1828	1100	1100	471	18 0	17 10
1829	1100	1100	17	16 0	16 5
1830	604	604	10	16 0	12 10
1831	1146	1145	10	16 0	12 10
1832	1116	1000	—	11 0	12 10
1833	604	614	4	11 10	12 10
1834	604	604	104	12 0	17 10
1835	1100	1100	70	12 0	18 0
1836	1100	1100	14022	12 0	18 0
1837	1100	1100	11	12 0	18 0
1838	1100	1100	10	12 0	18 0
1839	1100	1100	7	12 0	18 0
1840	1100	1100	10	12 0	18 0
1841	1100	1100	10	12 0	18 0
1842	1100	1100	10	12 0	18 0
1843	1100	1100	10	12 0	18 0
1844	1100	1100	10	12 0	18 0
1845	1100	1100	10	12 0	18 0
1846	1100	1100	10	12 0	18 0
1847	1100	1100	10	12 0	18 0
1848	1100	1100	10	12 0	18 0
1849	1100	1100	10	12 0	18 0
1850	1100	1100	10	12 0	18 0
1851	1100	1100	10	12 0	18 0
1852	1100	1100	10	12 0	18 0
1853	1100	1100	10	12 0	18 0
1854	1100	1100	10	12 0	18 0
1855	1100	1100	10	12 0	18 0
1856	1100	1100	10	12 0	18 0
1857	1100	1100	10	12 0	18 0
1858	1100	1100	10	12 0	18 0
1859	1100	1100	10	12 0	18 0
1860	1100	1100	10	12 0	18 0
1861	1100	1100	10	12 0	18 0
1862	1100	1100	10	12 0	18 0
1863	1100	1100	10	12 0	18 0
1864	1100	1100	10	12 0	18 0
1865	1100	1100	10	12 0	18 0
1866	1100	1100	10	12 0	18 0
1867	1100	1100	10	12 0	18 0
1868	1100	1100	10	12 0	18 0
1869	1100	1100	10	12 0	18 0
1870	1100	1100	10	12 0	18 0
1871	1100	1100	10	12 0	18 0
1872	1100	1100	10	12 0	18 0
1873	1100	1100	10	12 0	18 0
1874	1100	1100	10	12 0	18 0
1875	1100	1100	10	12 0	18 0
1876	1100	1100	10	12 0	18 0
1877	1100	1100	10	12 0	18 0
1878	1100	1100	10	12 0	18 0
1879	1100	1100	10	12 0	18 0
1880	1100	1100	10	12 0	18 0
1881	1100	1100	10	12 0	18 0
1882	1100	1100	10	12 0	18 0
1883	1100	1100	10	12 0	18 0
1884	1100	1100	10	12 0	18 0
1885	1100	1100	10	12 0	18 0
1886	1100	1100	10	12 0	18 0
1887	1100	1100	10	12 0	18 0
1888	1100	1100	10	12 0	18 0
1889	1100	1100	10	12 0	18 0
1890	1100	1100	10	12 0	18 0
1891	1100	1100	10	12 0	18 0
1892	1100	1100	10	12 0	18 0
1893	1100	1100	10	12 0	18 0
1894	1100	1100	10	12 0	18 0
1895	1100	1100	10	12 0	18 0
1896	1100	1100	10	12 0	18 0
1897	1100	1100	10	12 0	18 0
1898	1100	1100	10	12 0	18 0
1899	1100	1100	10	12 0	18 0
1900	1100	1100	10	12 0	18 0
1901	1100	1100	10	12 0	18 0
1902	1100	1100	10	12 0	18 0
1903	1100	1100	10	12 0	18 0
1904	1100	1100	10	12 0	18 0
1905	1100	1100	10	12 0	18 0
1906	1100	1100	10	12 0	18 0
1907	1100	1100	10	12 0	18 0
1908	1100	1100	10	12 0	18 0
1909	1100	1100	10	12 0	18 0
1910	1100	1100	10	12 0	18 0
1911	1100	1100	10	12 0	18 0
1912	1100	1100	10	12 0	18 0
1913	1100	1100	10	12 0	18 0
1914	1100	1100	10	12 0	18 0
1915	1100	1100	10	12 0	18 0
1916	1100	1100	10	12 0	18 0
1917	1100	1100	10	12 0	18 0
1918	1100	1100	10	12 0	18 0
1919	1100	1100	10	12 0	18 0
1920	1100	1100	10	12 0	18 0
1921	1100	1100	10	12 0	18 0
1922	1100	1100	10	12 0	18 0
1923	1100	1100	10	12 0	18 0
1924	1100	1100	10	12 0	18 0
1925	1100	1100	10	12 0	18 0
1926	1100	1100	10	12 0	18 0
1927	1100	1100	10	12 0	18 0
1928	1100	1100	10	12 0	18 0
1929	1100	1100	10	12 0	18 0
1930	1100	1100	10	12 0	18 0
1931	1100	1100	10	12 0	18 0
1932	1100	1100	10	12 0	18 0
1933	1100	1100	10	12 0	18 0
1934	1100	1100	10	12 0	18 0
1935	1100	1100	10	12 0	18 0
1936	1100	1100	10	12 0	18 0
1937	1100	1100	10	12 0	18 0
1938	1100	1100	10	12 0	18 0
1939	1100	1100	10	12 0	18 0
1940	1100	1100	10	12 0	18 0
1941	1100	1100	10	12 0	18 0
1942	1100	1100	10	12 0	18 0
1943	1100	1100	10	12 0	18 0
1944	1100	1100	10	12	

to answer him," you remarks, "the philosopher believes of and, for a logicist, he including admits the facts. If pending ar- and discuss- selle. His ore or zinc- acid; but, on of them would find supply all magnetic es- their pre- sent. "Per- taining the depth argument to the south and the steam en- tity argues, only contains mass, and metal inter- ests, and, as the low- constituting of pose, being the same par- t, but that of the ocean lar pheno- mene serve, that, remarkable material had evolutions of the whole space were not so com- plete, and ex- cept magni- cannot find in an argu- and scientific sitions, dining attached to course upon highly inter- and opinions myself wholly FRANK.

SIR,—In his profession—is not in the principles of pneumatics—but consists in what?—Why, the reporter of a country newspaper having told him that Dr. So-and-So acted with prudence and attention, was indefatigable in his endeavours, &c., &c., and having, at the same time, neglected to speak of the exertions of the manager. From this he jumps to the conclusion, that there was no qualified person to superintend the operations—a supposition as unlikely as untrue; but even if we suppose that, owing to circumstances, the manager might not be within call at the moment, is there anything here wherein to found, much less to prove, the charge of gross ignorance of coal mining in the south? The onus of proof rests with your correspondent. The remaining portion of his sentence has as much to do with the first as I have with the man in the moon; the first refers, or is meant to refer, to a particular case—which, together with its garnish, we have examined; but the latter portion, "so that between spirited and ignorant proceedings, even after an explosion, lives may be lost or gained—as the most of them are lost by the 'after-damp' that ensues," whether intended for a moral for the preceding, or an attempt at a fresh one, is wholly out of place; and the whole sentence exemplifies the truth of the old adage, that, "when the judgment is weak prejudice is strong." I call upon your correspondent to substantiate his assertions if he can, and to define the meaning of the word "south." Having written thus much, Mr. Editor, as you can probably find room for, I will conclude, and shall return to the remaining portion of your leader (and which refers more particularly to your observations) in an early Number.

OPTIMUS.

Burton, May 2.

[From a full knowledge of the ability and practical experience of the correspondent from whose letter we quoted the objectionable remarks, we leave all reply to him, being well assured that he will not fail answering the call, and, at the same time, we hope, put forth some grounds—"the where and the when"—on which to form a basis for his stringent comments on the practices in the south.]

ACCIDENTS IN MINES.

TO THE EDITOR OF THE MINING JOURNAL.

SIR.—A correspondent writing to your Journal concerning the lamentable accident by "fire-damp" at Flawery Field Colliery, says—"Would it not be well for some spirited owner to submit his colliery to the inspection of the more experienced northern viewer?" The more experienced northern viewer! Experienced in what? Why, in no part of the whole world has there ever been such destruction of human life by "fire-damp" as that experienced in the north of England collieries. Experienced viewers, indeed!—experience with a vengeance.

D. T.

—Iron Works, South Wales, April 30.

BLAENAVON IRON AND COAL COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR.—I was much pleased to find by your last Journal some explanation of the refusal to admit your reporter to the meeting of the above company, though it is pretty evident that but for your hints as to the true cause it would not have been forthcoming. Can the proprietors consider this a satisfactory report? I should say, by no means. The directors boast of a reduction of 1000/- per annum in the expenditure, but why things should have been so conducted as to leave any cause for such a reduction I cannot conceive. We find also that a sum of 645,859/- 17s. 9d. has been spent since the formation of the company—and in what? Have the directors anything to show for such an enormous expenditure? One furnace has been rebuilt, and a "lift" constructed, which, cast upwards of 4000ft. and now it is found that the old plan of raising materials (to save which the "lift" was built) is nearly, if not quite, as economical and efficient. The foundations of new furnaces and works have been laid on a most extensive scale almost ever since the company was formed, and there is not much chance of their being proceeded with for some years to come at least. There is also an item in the report of 262/- for expenses in London—a very considerable sum for an office establishment.

Now, does not this, may I ask, look like gross mismanagement? It is time that the shareholders should throw off their lethargy, and insist on a thorough reform in the whole management, and, until this is done, it will be useless for them to expect any return for their capital in the shape of a dividend.

T. S.

ON WATER-WHEELS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR.—Your correspondent, Mr. W. Wheeler, seems to doubt the accuracy of my statement in the Journal of the 16th ult., but I think if that gentleman's long practice had led him to build his wheels so that they should carry their water down seven eighths or nine-tenths of the diameter of the wheel, instead of two-thirds, as he does, according to his calculations, he would not have had any occasion to doubt. The wheel that I there alluded to does not lose any of its water before it gets 100 feet below the centre, or it carries the water thirty feet from the top before it loses any, and it does not lose the whole before it gets within two feet of the bottom of the wheel. Then, to 30 x $\frac{3}{4}$ = 34 feet, deduct for inertia on wheel, and friction on pumping, one-fourth, 8 ft. 5 in., leaves 25 ft. 5 in. of the effect, or as 25:5 is to 40, or nearly as 2 is to 3, as I before stated. What Mr. W. W. means by calling half the circumference the radius I do not know, but it appears to me that he has mistaken the meaning of the author he alludes to. I have always understood the semi-diameter, and not the semi-circumference, to be the radius of a circle—I should be glad if Mr. W. w. will put me right.

A. MINER.

Bickley, May 2.

RAILWAY CHARGES—SOUTH EASTERN LINE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR.—I beg to direct your attention to the accounts of the South-Eastern Railway, and the enormous charges for the small quantity of works on that line; also to the charge of 350,000/- or 400,000/- for a moiety of the line common to the Brighton and South Eastern, between Croydon and Red Hill—a charge of 100,000/- being much nearer the real value of the works and land. As a shareholder in this and other railways, I feel the absolute necessity of more than ordinary vigilance on the part of the railway press—at least, that portion not under the control of the directors, engineers, and contractors. The 700,000/- about to be raised cannot be required if the works have been fairly contracted for in the usual manner for public works.

AGUS.

The Iron Trade.—The Staffordshire Examiner contains a lamentable account of the depressed condition of the iron trade, from which we learn "that a large number of forges in this neighbourhood have ceased work, whereby a number of hands are thrown suddenly out of employment. We are informed that lack of orders, even of non-commissioning prices, has compelled many of the masters to stop their mills and discharge their men, and that it is very uncertain when they will recommence. Among the extensive forges closed are those of E. and G. Thorneycroft (Wednesbury), Russell Brothers, George Jefferies, and G. & J. Thorneycroft (Shropshire Iron Works). Several other extensive works are daily expected to cease operations; indeed, we believe, there is not a single forge master who does not contemplate the necessity of stopping. The most flourishing of these freely admit that if they could ensure the return of their customers and workmen when it suited them to recommence, they would forthwith resume their works."—This statement, we regret to say, is corroborated by our own experts; one correspondent writes—"More iron is now making than the demand calls for, and the masters are tired of 'the longer,' which, like all previous ones, is only binding on honest men—what will the trade come to?"

IMPORTANT INVENTION—ROTARY STEAM-ENGINE.—The Proprietor of *Cadre* announces the invention of a new steam-engine by Messrs. Stennell and Morris, of Gloucester, in the Herts Series. "It is not (says this Journal) upon the high or low-pressure, but on a rotary principle. It will require a comparatively very narrow space, leaves no chance of loss of steam by leakage, and is so simple that even the most unskilled person may manage it. Its cost will be little, of anything more, than half of the present engine. Hitherto, the force of steam-engines has not been equal to 300 horse-power, but this new machine may be brought up to 1000 horse-power. This statement, an important in the science of mechanics, is certified by a report from the authorities of Gloucester."

IRON WIRE.—It is strange that the plan of making bridges of iron wire, so successfully adopted in Switzerland, France, and elsewhere abroad, should not yet have found favour enough in England to be fairly tried on the large scale; the noble bridge of Freiburg, in Switzerland, is 300 feet wider than the Menai Bridge, and though it consists of one span, it is at least equally strong, and cost only a fifth part of the money. The bridge of Freiburg is 870 English feet long; that of Menai 340. The Menai bridge cost £120,000, that of Freiburg, £5,000. —*Potter*.

by Captain James Beck.

ON THE SYSTEM ADOPTED IN WORKING MINES AND COLLIERIES.

Following up our observations from last week's Journal, on the "conclusions" arrived at by the commissioners appointed "for Inquiring into the Employment and Condition of Children in Mines and Manufactories," we find, in regard to ironstone mines, that, from the far heavier nature of the labour, older and stronger children are of necessity employed, the pits in general are less perfectly ventilated or drained than the coal mines—consequently more unhealthy, producing the same physical deterioration and the same diseases, but in a more intense degree.

With respect to blast-furnaces, for reducing the ores of iron, the commissioners state that the operations connected with these works involve the necessity of eight work, in which both children and adults participate, on alternate weeks; the greatest objection appears to be in their having to sustain their employ throughout each alternate Sunday—but which custom, however, is partially abridged by some of the more considerate proprietors.

The underground labour in tin, copper, lead, and zinc mines, is described as being conducted on a far different system to that pursued in collieries—but very few children are employed at all, and there is no single instance of a girl or woman being engaged in that description of work; it is in the Cornish district alone that children are employed, and there they have sufficient food, with decent and comfortable clothing. The employment is not in general productive of apparent evil effects in early life, though essentially, from its nature, injurious in after life, which is much increased by the younger persons being placed in partnership with adults, thereby stimulated to exertions greatly beyond their age and powers, and thus, in a few years, it is too frequently proved that they have expended "the whole capital of their constitution." This result may also, in some measure, be attributed to the fatigue of climbing the ladders—hitherto, in general, the only means by which miners can go to or return from work; but the principal cause of the rapid deterioration of health and strength in miners is the prevalence of noxious air, the difficulties connected with the purification and renovation of which, and, indeed, the whole subject of ventilation, being incomparably greater in those mines than in collieries. With regard to surface employment, in the same mines, the commissioners agree, that though great numbers of girls as well as boys are engaged at an early age, the nature of the work is wholly free from the evils connected with underground labour, and, with the exception of occasional exposure to the inclemency of weather, besides the occupation of "beaking" and "jigging" (which is gradually being superseded by machinery), there is, in this branch of mining industry, nothing injurious, or even incompatible with the maintenance of robust health, which, indeed, is described as the general condition of the workpeople; the children and young persons have commonly sufficient food, warm and decent clothing, subject to no harsh or tyrannical treatment, and enjoy an almost complete immunity from serious danger.

In the smelting works, which are generally constructed near where the ores are raised, no children, and but few young persons, are engaged, with the exception of North and South Wales, where a number are employed, from nine years upwards (in South Wales girls as well as boys), of whom those engaged at the calcining-furnaces regularly work with the men twenty-four hours consecutively, on alternate days, not excepting Sunday—a term of work generally extending to thirty-six, and sometimes even to forty-eight hours, while, as in South Wales, the "long watch" includes the Sunday.

The commissioners, in conclusion, state they have endeavoured to present a faithful account of the "actual state, condition, and treatment" of the children and young persons employed in the "collieries and mines of the United Kingdom," and "of the effects of such employment on their bodily health;" but the effects of the employment on their "moral" they intend to reserve for their next report.

MINING CORRESPONDENCE.

ENGLISH MINES.

BOOMBEUR MINING COMPANY.

May 2.—I beg leave to inform you that the ends at the 110 fathom level, west of Forest's mine, and east of Dingle's mine, are without alteration since last reported. The hole in the 100 fathom level west is still worth about 10/- per fathom; in this level east the hole is disordered, being at present divided into small branches; the hole in the eastern slopes, in the back of this level, is eighteen inches wide, and worth 30/- per fathom; the hole in the western slopes, in the back of ditto, is two feet wide, and worth 6/- per fathom. In the ninety fathom level west the hole is twenty inches wide, and worth 36/- per fathom; the hole in the eastern slopes, in the back of this level, is sixteen inches wide, and worth 24/- per fathom; the hole in the mid-slopes, in the back of this level, is about sixteen inches wide, and worth 28/- per fathom; the hole in the western slopes, in the back of ditto, has not been taken down during the past week. In the eighty fathom level east the hole is ten inches wide, and intersected with ore; Hitchins's shaft is sunk about seven fathoms below this level, and still progressing in favourable ground; the hole in the slopes, in the back of this level, is eighteen inches wide, and worth 32/- per fathom. The Pinjack hole, in the seventy fathom level, west of Wall's shaft, is one foot wide, with stones of ore. The hole in the sixty-two fathom level, east of Bray's shaft, is still about eight inches wide, and unproductive; in this level, west of Hitchins's shaft, on the north side, the hole has greatly improved during the past week, being at present twenty inches wide, and worth 16/- per fathom. The tributary pitches are still looking favourable; we weighed on Friday last March ores, 312 tons 13 cwt. 2 qrs., and sampled April ores, computed 200 tons, of fair quality.

F. PHILLIPS.

WEST WHALE JEWEL MINING ASSOCIATION.

May 2.—The seventy east, on West Whale Jewel hole, is eighteen inches wide, kindly, and the ground favourable for driving. The fifty-seven east, on this hole, is worth 12/- per fathom; and in the mine sinking in the bottom of this level, the hole is worth 10/- per fathom; the fifty-seven east, on the south branch, is worth 7/- per fathom; at the fifty-seven east, on Buckham's hole, this hole is still disordered by the cross-course. At Quarry shaft, sinking below the thirty, on Tolcarne hole, the hole contains good stones of tin.

E. LEWIS.

TRIGOLIAN MINING COMPANY.

May 2.—I beg to inform you that the hole is extending the forty fathom level east is still large, and producing ore, worth 4/- per fathom. The ground in the cross-cut, going north at this level, is much improved since my last, which looks promising for the hole that is still before us. We have succeeded in sinking Baker's shaft a few feet below the forty fathom level, but find the water to be so much that we cannot proceed any further until we get down the new plough, and hope to complete it in the space of a week or ten days more. We have sampled to-day computed fifty-five tons of copper ore.

JAMES NINNIN.

UNITED MILLS MINING COMPANY.

May 2.—William's Shaft—Hole three feet wide, producing some good ore. Sixty Fathom Level, East End—Hole three and a half feet wide, very good ore; no alterations in the western end. Fifty Fathom Level—In the slopes, back of this level, the hole is two feet wide, good ore. East of Jones's Shaft—Hole two and a half feet wide, eighteen inches good ore. West of Diagonal Shaft—Hole five feet wide, coarse in quality. Diagonal Shaft—Hole two feet wide, a little improved ore since last week. Forty-easy Fathom Level, Eastern End—Hole two and a half feet wide, producing but little ore; no ground driven in the western end for the past week. Forty Fathom Level—Hole two feet wide, coarse in quality. Thirty Fathom Level—Hole one foot wide, producing good ore. Twenty Fathom Level—Hole three feet wide, producing some stones of ore.

N. LANGDON.

TAMAR SILVER-LEAD MINING COMPANY.

May 2.—Last Saturday we held our usual setting, when we set twenty-three pitchforks, and there were thirteen others—the men's time not expiring until another month—making a total of thirty-six pitchforks, employing ninety men. The prospects in the levels are as follows:—In the 100 fathom level the hole is two feet wide, carrying small branches of ore. In the 110 fathom level the hole is one foot wide—carrying work. In the 120 fathom level the hole is eighteen inches in width, composed of soft spar, mullion, and silver, lead, and zinc. In the eighty-five fathom level the hole is from two to three feet in width, carrying ground branches of ore. In the eighty-five fathom level the hole is three feet wide, composed of spar, flint spar, mullion, and some zinc. In the seventy-five fathom level the hole is two feet wide of greenish—rather poor. In the sixty-five fathom level the hole is one foot wide, chiefly composed of spar, intersected with ore. In the fifty-five feet end we are still in the hole ground. In the forty-five feet end the hole is three feet big, producing some good work—a promising road. In the thirty-five fathom level the hole is one foot wide, composed of spar, and a small quantity of ore.

J. BORACRE.

ASBESTOS CORROBORATED MINE COMPANY.

April 30.—I beg to inform you that we held our setting for May at those mines yesterday, for particulars of which I beg to refer you to the setting report. In the south end, at the eighty fathom level, we have very recently got an east and west hole overlooking south, but consist of present drivable to size or qualities; the east hole in this end is split into two branches, each yielding good work for leading; the hole to the north end, at this level, is four inches in width, producing some good work. In going south, at the forty fathom level, on the east end, at this level, the hole is four inches wide, but of poor composition; in the north end, at this level, the hole is four inches wide—hard. The deepest hole going east, at this level, is about eighteen inches in width, composed of spar, mullion, white asbestos, and good stones of ore; in the western end, at this level, the hole is one foot big, with spar, mullion, and ore. In going south, at the forty fathom level, the hole is six inches wide, good setting work.

F. R. BROWN.

TREFOIL MINING COMPANY.

May 2.—The hole in the forty fathom level, east of engine-shaft, is fifteen inches wide, producing some good ore. The hole in the wings sinking under the thirty fathom level, east of Williams's shaft, is two inches wide, very good tribute ground; the hole in the thirty fathom level, east of Williams's shaft, is small, and unproductive; the hole in the slopes, in the back of this level, is not quite so good as it has been. The hole in the twenty fathom level, east of Williams's shaft, is ten inches wide, and producing a small quantity of ore.

H. WILLIAMS. J. MORCOM.

TRUSLEIGH CONSOLS MINING COMPANY.

April 30.—In sinking Christon engine-shaft the hole is one foot and a half wide, worth about 10/- per fathom. The seventy west is still disordered. In the seventy east the hole is nine inches wide, favourable, but without much ore. The sixty west is two feet wide, with some ore. The sixty east is one foot and a half wide, not much mineral. The fifty west is suspended for the present, to rise against a wing coming down from the level above. The forty is twelve inches wide, kindly, with stones of ore. In sinking Good Fortune shaft, under the forty-four, the hole is fifteen inches wide, worth about 10/- per fathom. The forty-four east we have set to drive on tribute. There is no alteration in any other part of the mine. W. RICHARDS.

TINCROFT MINING COMPANY.

May 2.—Since my last report we have taken down the hole in each end, at the forty fathom level, and I am glad to say that the ore which we got from them fully corroborate my opinion as to their value, which I calculate to be 30/- per fathom—they are of present worth about that sum, and likely to continue; the ends are now about three fathoms from the shaft; we shall now open a plat, and commence sinking under the fifty as quickly as possible. The hole in the forty end west is four feet wide, and producing good quality copper ore, worth 25/- per fathom. The hole in the wings sinking under the forty continues much the same as to size and quality as it has been for some fathoms—worth from 20/- to 25/- per fathom. Other places throughout the mine continue much the same as for some time past. W. PAUL.

GODFREY CONSOLS MINING COMPANY.

April 30.—We have put the pumps to prepare to sink Roberts's engine-shaft under the 100 fathom level, on Wheal Dolphin hole. The 100 Fathom Level, east, on this hole—The hole is three feet wide, producing rich stones of ore. The 100 Fathom Level West—The hole is two feet wide, producing one ton of ore per fathom. Ninety Fathom Level East—The hole is two and a half feet wide, with rich stones of tin. Ninety Fathom Level West—The hole in the two feet wide, with stones of tin, and some ore. Eighty Fathom Level West—The hole is two feet wide, worth 10/- per fathom for ore. Seventy Fathom Level West—The hole is eighteen inches wide, six inches good hole for tin. Gandy's shaft is hoisted to the eighty fathom level. Sims's Shaft—The 110 Fathom Level West—The hole is three feet wide, producing good stones of tin. The 100 Fathom Level, east of Pearce's Engine shaft—The hole is two feet wide, with rich stones of tin. The 100 Fathom Level West—The hole is three feet wide, with producing stones and some tin. Orchard Lane—Fifty Fathom Level, east of New Engine shaft—The hole is six feet wide, with stones of ore and some tin. Wings sinking under the Forty Fathom Level—The hole is three feet wide, with stones of tin. There is no particular alteration in the other parts of the mine since last report. I am happy to inform you, that on Thursday last we got the steam-whim to work, which promises to be a good machine; she is now drawing from the bottom at a good rate; it will, no doubt, be a great saving to the adventurers in expense—besides, we shall be able to keep the eastern part of the mine much cheaper of staff. You will receive herewith the setting report for yesterday's setting, together with the accounts, &c., for March.

J. SEATON.

FOREIGN MINERS.

BRASILIAN COMPANY.

MONEY MARKET AND CITY NEWS.

CURRENT PRICES OF ENGLISH AND FOREIGN FUNDS.

Canada Money, 92½	Dutch, 2½ per Cent., 92½
New ½ per Cent., 92½	Dutch, 2½ per Cent., 92½
Exchequer Bills, 9½ p.m.	Portuguese, 5 per Cent., 92½
Hongkong Bills, 5 per Cent., 100½ 4½	Dutch, 2½ per Cent., 92½
Brazil, 5 per Cent., 67½	Scandinavia, 2 per Cent., 92½
Danish, 5 per Cent., 67½	Chile, 4 per Cent., 75½
Mexican, 6 per Cent., 118½	Colombian, 6 per Cent., 20½
	Mexican, 6 per Cent., 92½

REMARKS ON THE OPERATIONS OF THE WEEK.

SATURDAY, April 20.—The English securities did not maintain their rates, some gains by the Stock and Currency brokers presented an unfavorable influence; Canada left off for Money, 92½; and for Account, 92½; Bank Stock, 107½ pm.—In Stock, 24½; India Stock, 20½; 25½ pm.; and Exchequer Bills, 27½, 28½ pm.—In the foreign houses but trifling variation occurred.—The share market was also stationary, former quotations remaining undisturbed.—United Mexican Mining Association, new, 20.

SUNDAY.—This was observed as a close holiday on the Stock Exchange.

TUESDAY.—The funds opened heavily, and with little doing, but, upon the report of rather favourable news from India, business became more active, with a slight improvement in the quotations; eventually, however, prices receded, and Canada settled at the close of business at 92½ for Money, and 92½ for Account; Bank Stock, 107½; India Stock, 20½; and Exchequer Bills, 27½, 28½ pm.—Foreign securities were also heavy, for the little business transacted in them; Mexican, however, was the stock which underwent the greatest decline; Spanish Active, 20½; Portuguese, 5 per Cent., 92½; Colombian, 4½; Mexican, 20½; Brazil, 67½; Belgian, 100½ 10½; Danish, 67½; and Revenue Arrears, 20½.—The only change of consequence in the share market was a slight reduction in Brightons, which are now quoted 20½; Blackwall, 17½; Bristol and Exeter, 4½; Chelmsford and Great Western, 20½; Eastern Counties, new, 8½; Great Western, 92½; South Western, 8½; Manchester and Birmingham, 20½; Northern and Eastern, 42½; North Midland, 67½; South Eastern and Dover, 20½; York and North Midland, 67½.—In mining shares, Bismarck Iron and Coal Company were marked 100; Cobre Copper, 67½; and United Mexican, new, 20½.—In joint-stock banks, Colonial Bank, 20½; Union of Australia, new, 20½; and Mexican and South American Company, 20.

There was but little business transacted in the foreign exchanges, and the rates may be considered the same as last post.

The premium on gold at Paris is 10 per milie, which, at the English Mint price of 31.17s. 10d. per ounce for standard gold, gives an exchange of 25.40s., and the exchange at Paris on London at short being 25.62s., it follows that gold is 0.80 per cent. dearer in London than in Paris.

By advice from Hamburg the price of gold is 480 per mark, which, at the English Mint price of 31.17s. 10d. per ounce for standard gold, gives an exchange of 19.9s., and the exchange at Hamburg on London at short being 19.71s. It follows that gold is 1.02 per cent. dearer in London than in Hamburg.

WEDNESDAY.—The English funds were variously acted upon by the business transacted, but prices did not fluctuate in a material degree. In the first instance, on the rate of 92½, Canada by the Chancery broker, they declined, and subsequently recovered on a purchase by the same party and others which followed; on the whole, the market of clearing looked firm; Canada for Money closed at 92½; for Account, 92½; Exchequer Bills, 67½; Bank Stock, 107½; India Stock, 20½; India Bonds, 20½ pm.—The business in the foreign securities was limited, but some of the South American stocks were quoted a trifle higher.—London and Birmingham Railway shares were done at 100½ 100½; Greenwich, 20½; South Eastern, 20½; and South Western, 20½; London and Westminster Joint-Stock Bank, 20½; Provincial Bank of Ireland, 4½; Union Bank of Australia, new, 20½; Union Bank of London, new, 20½.—General Steam Navigation Company, 20.

THURSDAY.—There was no particular feature in the Stock Exchange except a large portion of Quebec (supposed to be an account of the Court of Bankruptcy), which had the effect of giving additional firmness to the market. Money was worth about 2½ per cent.—There was not much business, but very little change in the foreign securities; Spanish stock was heavy, owing, we believe, to the recall of lower prices from Paris; in other respects the market was stationary.—Railway shares not so much in demand, but prices were unimpaired.—United Mexican Mining Association, new, 20½; British North American Joint Stock Bank, 20½; London, 10½; National of Ireland, 10; Union of Australia, 20½; etc., new, 20.

FRIDAY.—The principal feature in the money market was a sale of 100,000, required for the Court of Chancery, the effect of which was to slightly depress prices, and Canada left off at 92½ for Money, and 92½ for Account; Bank Stock, 107½; India Stock, 20½; and Exchequer Bills, 67½, 20½ pm.—There was a decline of nearly 1 per cent. in Mexican Stock, owing to a sale, made, it was supposed, from private intelligence of a political nature regarding the Texas expedition; and, in other respects, the foreign market was flat, with more sellers than buyers.—More business was done in railway shares, without producing, however, any material improvement in prices.—Imperial Brasilia Mining Association, 6½; Australian Joint Stock Bank, 20½; London and Westminster, 20½; Union of London, 20½; National of Ireland, 10; Union of Australia, 20½; etc., new, 20.

(From our own correspondents.)

LATEST PRICES OF IRISH STOCKS.—2½ per Cent. Consols, 92½—2½ Stock, 92½—Ditto New, 100½—2½ per Cent. Debentures, 9½—Bank Stock, 12½—Kingstown Railway, 6½—Brougham, 2—National Insurance Company, 10—City of Dublin Stock Company, 100—Bank Stock, 100½—St. Patrick's and Irish Steam Co., 100—Hibernia Bank, 20½—Royal Bank, 10—Mining Company of Ireland, 14—Wicklow Copper Mine, 12.

NEWCASTLE, THURSDAY.—There is no alteration in prices this week worthy of note. Stock items are flat, but the demand for railway shares is rather dull.—North of England Joint Stock Bank, 4½; Northumberland and Durham District, 6½; Newcastle, Shields, and Sunderland Union, 6½; Newcastle upon Tyne Joint Stock, 6½; Newcastle Commercial, 6½; Sunderland Joint Stock, 6½; Darlington District, 6½; Carlisle City and District, 6½; Carlisle and Cumberland, 6½; Newcastle and Durham County, 6½; Newcastle and Carlisle Railway, 6½; Newcastle and North Shields, 6½; Brandling Junction, 6½; Durham and Sunderland, 6½; Cheviot, 6½; Hartlepool and Stockton, 6½; Hartlepool Dock and Railway, 6½; Great North of England, 6½; Newcastle Union Shipping Company, 6½; Port of Newcastle, 6½; London, Newcastle, and South Shields, 6½; Gateshead and Tyne, 6½; North and South Shields Steam Ferry, 100—Newcastle Waterfront Water Company, 6½; Newcastle and Gateshead Union Gas Company, 7½; Durham County Coal Company, 10.

WELL, THURSDAY.—Although the prices of railway shares have been generally well sustained one or two weeks have slightly receded since our last, and among them North Midland and Manchester and Leeds—the latter, however, to a very trifling extent. There is little passing in Hull and Selby—bonds, 6½, orders 6½, 6½; Liverpool and Derby 6½, or 6½, perhaps, might be made just now, as there is an order of two or three vessels. There are buyers of Yorkshire District Bonds at 6½, and sellers at under 6½, those that are thought worth notice of these rates—Birmingham and Derby Railway, 6½ to 6½; Birmingham and Gloucester, 6½ to 6½; the Grand Junction, 6½ to 6½; Great North of England, 6½; Green Woods, 6½; Hull and Derby, 6½ to 6½; Leeds and Selby, 6½ to 6½; Liverpool and Manchester, 6½; London and Birmingham, 6½; London and Brighton, 6½; London and South Western, 6½; Macclesfield and Biddulph, 6½; Manchester and Liverpool, 6½; North Midland, 6½; North Eastern, 6½; York and North Midland, 6½; Edinburgh and Glasgow, 6½; Macclesfield and Biddulph, 6½; York and North Midland, 6½; York City and County, 6½; York Union, 6½; Leeds and Liverpool Canal, 6½; Barnsley, 6½; Huddersfield, 6½; Wakefield, 6½; Leeds and Yorkshire Agricultural, 6½; Doncaster and Joint Stock, 6½; Hull Docks Company, 6½; Hull Gas Works, 6½; Hull Fire and Oil Co., 6½; Hull Mills, 6½; Hull Marine Insurance Company, 6½.

LEEDS, THURSDAY.—North Midland Railway, 6½; York and North Midland 6½; Lancashire and Yorkshire, 6½; Hull and Selby, 6½; Great North of England and Lancashire, 6½; Bradford, 6½; Leeds Banking Com., 6½; Leeds and West Riding, 6½; Leeds Commercial, 6½; Yorkshire Dist. Co., 6½; Yorkshire Agricultural and Commercial, 6½; York City and County, 6½; York Union, 6½; Leeds and Liverpool Canal, 6½; Barnsley, 6½; Huddersfield, 6½; Wakefield, 6½; Leeds and Yorkshire Agricultural Company, 6½; Leeds Gas and Electric Co., 6½; Leeds New Gas Company, 6½; Leeds Commercial and Banking, 6½.

GLASGOW, WEDNESDAY.—Bathgate Railway, 6½; Dundee and Arbroath, 6½; Edinburgh and Glasgow, 6½; Edinburgh and Dunbarton, 6½; Glasgow and Ayrshire, 6½; Glasgow, Paisley, Kilmarnock, and Ayr, 6½; Monkland and Kirkintilloch, 6½; Renfrew, 6½; Wishaw and Coatbridge, 6½.

EDINBURGH, WEDNESDAY.—Edinburgh and Glasgow Railway, 6½; Edinburgh and Edinburgh, 6½; Glasgow and Greenock, 6½; Glasgow and Dunbarton, 6½; Glasgow and Ayrshire, 6½; Wishaw and Coatbridge, 6½; Dundee and Arbroath, 6½; Arbroath and Peterhead, 6½.

MONTGOMERY, WEDNESDAY.—The continued abundance of money in the English market has materially relieved the effect has manifested on our funds. The problem of increased which our bonds still retain some depreciated money in view of this, but as it is evident they cannot longer afford to allow 6½ per cent. on such an investment, while dividends in London are considerably over a half per cent. higher, it is to be expected that the value of our bonds will be increased. With regard to the value of these investments, based on the general readings of the market, having comparative support, there is every prospect of their steady going. The shareholders and the bondholders will receive substantial dividends paid out within the field month. They are expected officially to pay to full. During the past month we have had more business during, particularly in Scotch stocks, and an increase in the English market. The early indications in Scotch stocks were an increase of 6½ to 7½ per cent. on the £100,000 of £100,000. The late movements upon the reduction of the dividend from 6½ to 5½ per cent. Glasgow, Coatbridge, and Renfrew, 6½; Dundee and Arbroath, 6½; Arbroath and Peterhead, 6½.

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FRIEDRICHSHAFEN, WEDNESDAY.—Edinburgh and Glasgow Railway, 6½; Edinburgh and Edinburgh, 6½; Glasgow and Greenock, 6½; Glasgow and Dunbarton, 6½; Glasgow and Ayrshire, 6½; Wishaw and Coatbridge, 6½; Dundee and Arbroath, 6½; Arbroath and Peterhead, 6½.

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BRISBANE, FRIDAY.—Our market is in the same inactive state as when I wrote last, but no much pressing, and scarcely any alteration in prices.—Great Western Railway, 6½ to 6½; Bristol and Gloucester, 6½ to 6½; Bath, 6½ to 6½; Bristol and Exeter, 6½ to 6½; Birmingham and Derby, 6½ to 6½; Birmingham and Gloucester, 6½ to 6½; London and Brighton, 6½ to 6½; Cheltenham Union, 6½ to 6½; London and Brighton, 6½ to 6½; Taff Vale, 6½ to 6½; Bristol Gas Company, 6½ to 6½; Cheltenham, 6½ to 6½.

LIVERPOOL, FRIDAY.—Grand Junction Railway, 10½; Lancaster and Preston, 20½; Liverpool and Manchester, 10½; North Union, 10½; Paris and Rouen, 12½; York and North Midland, 10½; Alpine Bank, 20½; Borought, 10½; Bank of Liverpool, 10½; Liverpool Banking Company, 10½; Manchester and Liverpool District, 10½; Liverpool and Derby, 10½; Cheltenham Union, 10½; Union Plate Glass Company, 6½.

MANCHESTER, THURSDAY.—Manchester and Birmingham Railway, 20½; Manchester, Bolton, and Bury, 6½; Manchester and Leeds Railway, 20½; Bank of Manchester, 6½; Stockport, 20½; Manchester and Liverpool District, 10½; Manchester and Salford, 10½; South Lancashire, 6½; Union of Manchester, 6½; Manchester Fire and Life Assurance Company, 6½; Union Plate Glass Company, 6½.

BIRMINGHAM, THURSDAY.—London and Birmingham Railway, 10½; London and Brighton, 6½; London and South Western, 6½; Great Western, 10½; Great Western, 10½; Birmingham Banking Company, 10½; Birmingham and Midland, 6½; North and South Wales, 6½; Royal, 6½; South Lancashire, 6½; Union, 10½.

SALE OF COPPER ORES IN CORNWALL.

Sampled April 20, and sold at Tyack's Hotel, Camborne, May 5.

Mines.	Tons.	Price.	Purchaser.	Mines.	Tons.	Price.	Purchaser.
Cornwall	131	4½	9½ Williams	United H.	34	11	5½ Freemans
		6			ditto	22	5½ Vivians
		8			ditto	22	5½ Vivians
		9			ditto	22	5½ Vivians
		9½			ditto	22	5½ Vivians
		10			ditto	22	5½ Vivians
		11			ditto	22	5½ Vivians
		12			ditto	22	5½ Vivians
		13			ditto	22	5½ Vivians
		14			ditto	22	5½ Vivians
		15			ditto	22	5½ Vivians
		16			ditto	22	5½ Vivians
		17			ditto	22	5½ Vivians
		18			ditto	22	5½ Vivians
		19			ditto	22	5½ Vivians
		20			ditto	22	5½ Vivians
		21			ditto	22	5½ Vivians
		22			ditto	22	5½ Vivians
		23			ditto	22	5½ Vivians
		24			ditto	22	5½ Vivians
		25			ditto	22	5½ Vivians
		26			ditto	22	5½ Vivians
		27			ditto	22	5½ Vivians
		28			ditto	22	5½ Vivians
		29			ditto	22	5½ Vivians
		30			ditto	22	5½ Vivians
		31			ditto	22	5½ Vivians
		32			ditto	22	5½ Vivians
		33			ditto	22	5½ Vivians
		34			ditto	22	5½ Vivians
		35			ditto	22	5½ Vivians
		36			ditto	22	5½ Vivians
		37			ditto	22	5½ Vivians
		38			ditto	22	5½ Vivians
		39			ditto	22	5½ Vivians
		40			ditto	22	5½ Vivians
		41			ditto	22	5½ Vivians
		42			ditto	22	5½ Vivians
		43			ditto	22	5½ Vivians
		44			ditto	22	5½ Vivians
		45			ditto	22	5½ Vivians
		46			ditto	22	5½ Vivians
		47	</td				